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REMARKS

This is a full and timely response to the outstanding Office action mailed December 12, 2005. Upon entry of the amendments in this response claims 1, 6, 11, and 16 are pending. More specifically, claims 1, 6, 11, and 16 are amended and claims 2-5, 7-10, and 12-15 are canceled. Claims 2-5, 7-10, and 12-15 are canceled without prejudice or disclaimer. Applicant takes this action merely to reduce the number of issues and to facilitate early allowance and issuance of the present application. Applicant reserves the right to pursue the subject matter of these canceled claims in a continuing application, if applicant so chooses, and does not intend to dedicate any of the canceled subject matter to the public. These amendments are specifically described hereinafter.

I.   Present Status of Patent Application

Claims 1, 2, 6, 7, 11, and 12 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over *Jiang, et al* (U.S. Patent No. 6,385,641) in view of *Pirolli, et al* (U.S. Patent No. 6,098,064) in further view of *Adar, et al* (U.S. Patent No. 6,493,702). Claims 3-5, 8-10, and 13-16 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over *Jiang, et al* (U.S. Patent No. 6,385,641), *Pirolli, et al* (U.S. Patent No. 6,098,064), *Adar, et al* (U.S. Patent No. 6,493,702) in view of *Barrett, et al* (U.S. Patent No. 5,727,129). To the extent that these rejections have not been rendered moot by the cancellation of claims, they are respectfully traversed.

II.   Rejections Under 35 U.S.C. §103(a)

A.   Claims 1-5

The Office Action rejects claims 1-5 under 35 U.S.C. §103(a) as allegedly being unpatentable over *Jiang, et al* (U.S. Patent No. 6,385,641) in view of *Pirolli, et al* (U.S. Patent No. 6,098,064) in further view of *Adar, et al* (U.S. Patent No. 6,493,702) in further view of

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Barrett, et al (U.S. Patent No. 5,727,129). For at least the reasons set forth below, Applicant respectfully traverses the rejection.

Independent claim 1 as amended recites:

1.   A system for facilitating communication between a user and a network of information items, comprising:

a remote data storage device for storing the information items, wherein the information items are stored in the form of pages, and wherein the pages contain a plurality of links to other information items;

a multi-layer architecture comprising:

a client device having a user interface program thereon, for allowing a user to interface with the network and request the information items; and

a server device, in communication with the client device and in communication with the remote storage device, for handling information requests from multiple clients and for storing information retrieved from the data storage devices locally in a server cache memory;

a data collection module for collecting and storing successive actions of a particular authenticated user; and

a probability module in communication with the data collection module for *calculating a probability for the desirability of the links based on the action of the particular user and for comparing the probability to a predetermined threshold value to identify predicted links and for retrieving the predicted information items associated with the links from the remote data storage devices and enabling the storage of the predicted information items on both the client device layer and the server device layer of the multi-layer architecture in advance of the particular user's request for the selected information items*, the probability module further configured to:

update the probabilities assigned to the links with each successive user activity;

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> abort retrieving the predicted information items if the user requests an
>> information item other than the predicted information items;
> continue retrieving the predicted information items from the remote data
>> storage devices and storing the predicted information items in the
>> server cache memory if the user requests the predicted information
>> item; and
> downloads the user requested information item to the client from the
>> server cache memory;
> wherein the probability is calculated based solely on the actions of the
>> particular use and not as a member of a larger set of users.

(Emphasis added).

For a proper rejection of a claim under 35 U.S.C. §103, the cited combination of references must disclose, teach, or suggest all elements/features/steps of the claim at issue. *See, e.g., In re Dow Chemical*, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988) and *In re Keller*, 208 U.S.P.Q.2d 871, 881 (C.C.P.A. 1981). Applicant respectfully submits that independent claim 1 is allowable for at least the reason that the combination of *Jiang, Pirolli, Adar*, and *Barrett* does not disclose, teach, or suggest at least **calculating a probability for the desirability of the links based on the action of the particular user and for comparing the probability to a predetermined threshold value to identify predicted links and for retrieving the predicted information items associated with the links from the remote data storage devices and enabling the storage of the predicted information items on both the client device layer and the server device layer of the multi-layer architecture in advance of the particular user's request for the selected information items.** Even if *Pirolli* teaches that the storage of the predicted information may be enabled on multiple levels, *Pirolli* teaches away from calculating the probability for a particular user. "[T]he P&C module 202 in the proxy server 112…and server 104…compute a collective context Q for a community of client computers as opposed to an individual context Q for a single computer." See *Pirolli*, col. 11, lines 22-26. Since *Pirolli*

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teaches away from a probability calculation for a particular user in a multi-layer architecture, using *Pirolli* in a combination of references is improper.

As the cited combination of references does not disclose, teach, or suggest, either implicitly or explicitly, all the elements of claim 1, the rejection should be withdrawn. Additionally and notwithstanding the analysis hereinabove, there are other reasons why claim 1 is allowable.

Moreover, the Office action has included a conclusion that "[t]he use of proxy servers is well known and ubiquitous in the art for providing a centralized means for storing user information and enable users to access their cached pages from any computer that is attached to the proxy." *See Office Action*, page 4, section 5. Applicants appreciate the clarification that this statement is not along the lines of an "Official Notice", but the result of a teaching cited in the *Pirolli* reference. However, to forestall any inference that the usage of terms like "well-known and ubiquitous" might provide, Applicants again traverse this finding that the subject matter is well known and ubiquitous. Particularly in the context of the claimed combination that includes a data collection module for collecting and storing successive actions of a particular authenticated user and a probability module in communication with the data collection module for calculating a probability for the desirability of the links by the particular user, the subject matter alleged to be well-known is too complex for a reasonably skilled person to consider it to be well-known to the point that no additional evidence is needed. Therefore, the well-known conclusion is improper and should be withdrawn.

B.   Claims 6-10

The Office Action rejects claims 6-10 under 35 U.S.C. §103(a) as allegedly being unpatentable over *Jiang, et al* (U.S. Patent No. 6,385,641) in view of *Pirolli, et al* (U.S. Patent No. 6,098,064) in further view of *Adar, et al* (U.S. Patent No. 6,493,702) in further view of *Barrett, et al* (U.S. Patent No. 5,727,129). For at least the reasons set forth below, Applicant respectfully traverses the rejection.

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Independent claim 6 as amended recites:

6.   A method for facilitating communication between a user and a network of
information items, comprising:

providing a multi-layer architecture comprising a client device and a server device;

storing the information items on a remote data storage device, wherein the information
        items are stored in the form of pages, and wherein the pages contain a plurality of
        links to other information items;

configuring the client device having a user interface program thereon, to allow a user to
        interface with the network and request a download of the information items;

configuring the server device for handling information requests from multiple clients and
        for storing information retrieved from the data storage devices locally in server
        cache memory;

collecting and storing successive actions of an authenticated particular user;

calculating a probability for the links based on the successive actions of the
        authenticated particular user;

comparing the probability to a predetermined threshold value;

retrieving the information items associated with the links from the remote data storage
        devices;

enabling the storage of the information items on both the client device layer and the
        server device layer of the multi-layer architecture in advance of the particular
        user's request for the selected information items;

updating the probabilities assigned to the links with each successive user activity;

retrieving the predicted information items if the user requests an information item other
        than the predicted information items;

retrieving the predicted information items from the remote data storage devices; and
        storing the predicted information items in the server cache memory if the user
        requests the predicted information item; and

downloading the user requested information item to the client from the server cache
        memory;

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wherein the probability is calculated based solely on the actions of the particular use and

not as a member of a larger set of users.

(Emphasis added).

For a proper rejection of a claim under 35 U.S.C. §103, the cited combination of references must disclose, teach, or suggest all elements/features/steps of the claim at issue. Applicant respectfully submits that independent claim 6 is allowable for at least the reason that the combination of *Jiang, Pirolli, Adar,* and *Barrett* does not disclose, teach, or suggest at least **calculating a probability for the links based on the successive actions of the authenticated particular user.** Even if *Pirolli* teaches that the storage of the predicted information may be enabled on multiple levels, *Pirolli* teaches away from calculating the probability for a particular user. "[T]he P&C module 202 in the proxy server 112...and server 104...compute a collective context Q for a community of client computers as opposed to an individual context Q for a single computer." See *Pirolli,* col. 11, lines 22-26. Since *Pirolli* teaches away from a probability calculation for a particular user in a multi-layer architecture, using *Pirolli* in a combination of references is improper.

As the cited combination of references does not disclose, teach, or suggest, either implicitly or explicitly, all the elements of claim 6, the rejection should be withdrawn. Additionally and notwithstanding the analysis hereinabove, there are other reasons why claim 6 is allowable.

C.   <u>Claims 11-15</u>

The Office Action rejects claims 11-15 under 35 U.S.C. §103(a) as allegedly being unpatentable over *Jiang, et al* (U.S. Patent No. 6,385,641) in view of *Pirolli, et al* (U.S. Patent No. 6,098,064) in further view of *Adar, et al* (U.S. Patent No. 6,493,702) in further view of *Barrett, et al* (U.S. Patent No. 5,727,129). For at least the reasons set forth below, Applicant respectfully traverses the rejection.

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Independent claim 11 as amended recites:

11.   A method for facilitating communication between a user and a network of information items, comprising:

     means for providing a multi-layer architecture comprising a client device and a server device;

     means for storing the information items on a remote data storage device, wherein the information items are stored in the form of pages, and wherein the pages contain a plurality of links to other information items;

     means for configuring the client device having a user interface program thereon, to allow a user to interface with the network and request a download of the information items;

     means for configuring the server device for handling information requests from multiple clients and for storing information retrieved from the data storage devices locally in server cache memory;

     means for collecting and storing successive actions of an authenticated particular user;

     means for calculating a probability for the links based on the successive actions of the authenticated particular user;

     means for comparing the probability to a predetermined threshold value;

     means for retrieving the information items associated with the links from the remote data storage devices;

     means for enabling the storage of the information items on both the client device layer and the server device layer of the multi-layer architecture in advance of the particular user's request for the selected information items;

     means for updating the probabilities assigned to the links with each successive user activity;

     means for retrieving the predicted information items if the user requests an information item other than the predicted information items;

     means for retrieving the predicted information items from the remote data storage devices; and

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means for storing the predicted information items in the server cache memory if the user
       requests the predicted information item; and

means for downloading the user requested information item to the client from the server
       cache memory;

wherein the probability is calculated based solely on the actions of the particular use and
       not as a member of a larger set of users.

(Emphasis added).

For a proper rejection of a claim under 35 U.S.C. §103, the cited combination of references
must disclose, teach, or suggest all elements/features/steps of the claim at issue. Applicant
respectfully submits that independent claim 11 is allowable for at least the reason that the
combination of *Jiang, Pirolli, Adar,* and *Barrett* does not disclose, teach, or suggest at least
**means for calculating a probability for the links based on the successive actions of the
authenticated particular user.** Even if *Pirolli* teaches that the storage of the predicted
information may be enabled on multiple levels, *Pirolli* teaches away from calculating the
probability for a particular user. "[T]he P&C module 202 in the proxy server 112…and server
104…compute a collective context Q for a community of client computers as opposed to an
individual context Q for a single computer." See *Pirolli,* col. 11, lines 22-26. Since *Pirolli*
teaches away from a probability calculation for a particular user in a multi-layer architecture,
using *Pirolli* in a combination of references is improper.

As the cited combination of references does not disclose, teach, or suggest, either
implicitly or explicitly, all the elements of claim 11, the rejection should be withdrawn.
Additionally and notwithstanding the analysis hereinabove, there are other reasons why claim 11
is allowable.

D.   Claim 16

The Office Action rejects claim 16 under 35 U.S.C. §103(a) as allegedly being
unpatentable over *Jiang, et al* (U.S. Patent No. 6,385,641) in view of *Pirolli, et al* (U.S. Patent
No. 6,098,064) in further view of *Adar, et al* (U.S. Patent No. 6,493,702) in further view of

Barrett, et al (U.S. Patent No. 5,727,129). For at least the reasons set forth below, Applicant respectfully traverses the rejection.

Independent claim 16 as amended recites:

16. (Currently Amended). A first network for facilitating communication between a user and a network of information items, comprising:

a remote data storage device for storing the information items, wherein the information items are stored in the form of pages, and wherein the pages contain a plurality of links to other information items;

a multi-layer architecture comprising:

a client device having a user interface program thereon, for allowing a user to interface with the network and request a download of the information items;

a server device, in communication with the client device and in communication with the remote storage device, for handling information requests from multiple clients and for storing information retrieved from the data storage devices locally in server cache memory; and

the first network;

a data collection module for collecting and storing successive actions of an authenticated particular user; and

a probability module in communication with the data collection module for *calculating a probability for the links based on the successive actions of the authenticated particular user,* and for comparing the probability to a predetermined threshold value, and for retrieving the information items associated with the links from the remote data storage devices and enabling the storage of the information items on both the client device layer and the server device layer of the multi-layer architecture in advance of the particular user's request for the selected information items;

wherein the probability module updates the probabilities assigned to the links with each

successive user activity;

wherein the probability module aborts retrieving the predicted information items if the

user requests an information item other than the predicted information items;

wherein the probability module continues retrieving the predicted information items from

the remote data storage devices and storing the predicted information items in the

server cache memory if the user requests the predicted information item; and

wherein the probability module downloads the user requested information item to the

client from the server cache memory;

wherein the probability is calculated based solely on the actions of the particular use and

not as a member of a larger set of users.

(Emphasis added).

For a proper rejection of a claim under 35 U.S.C. §103, the cited combination of references must disclose, teach, or suggest all elements/features/steps of the claim at issue. Applicant respectfully submits that independent claim 16 is allowable for at least the reason that the combination of *Jiang, Pirolli, Adar,* and *Barrett* does not disclose, teach, or suggest at least **calculating a probability for the links based on the successive actions of the authenticated particular user.** Even if *Pirolli* teaches that the storage of the predicted information may be enabled on multiple levels, *Pirolli* teaches away from calculating the probability for a particular user. "[T]he P&C module 202 in the proxy server 112...and server 104...compute a collective context Q for a community of client computers as opposed to an individual context Q for a single computer." See *Pirolli*, col. 11, lines 22-26. Since *Pirolli* teaches away from a probability calculation for a particular user in a multi-layer architecture, using *Pirolli* in a combination of references is improper.

As the cited combination of references does not disclose, teach, or suggest, either implicitly or explicitly, all the elements of claim 16, the rejection should be withdrawn. Additionally and notwithstanding the analysis hereinabove, there are other reasons why claim 16 is allowable.

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Additionally, with regard to the rejection of claim 16, none of *Jiang, Adar,* or *Barrett* make up for the deficiencies of *Pirolli* noted above. Therefore, claim 16 is considered patentable over any combination of these documents.

III.   Miscellaneous Issues

Any other statements in the Office Action that are not explicitly addressed herein are not intended to be admitted. In addition, any and all findings of inherency are traversed as not having been shown to be necessarily present. Furthermore, any and all findings of well-known art and official notice, or statements interpreted similarly, should not be considered well known for at least the specific and particular reason that the Office Action does not include specific factual findings predicated on sound technical and scientific reasoning to support such conclusions.

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CONCLUSION

In light of the foregoing amendments and for at least the reasons set forth above,

Applicant respectfully submits that all objections and/or rejections have been traversed, rendered

moot, and/or accommodated, and that the now pending claims 1, 6, 11, and 16 are in condition

for allowance. Favorable reconsideration and allowance of the present application and all

pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic

conference would expedite the examination of this matter, the Examiner is invited to call the

undersigned agent at (770) 933-9500.

Respectfully submitted,

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